/114/

121 I shall describe to you in the following some aspects of the social structure of the same Indian tribe whose conceptions about the soul Herr Dr. Zerries has just discussed. The title, "Sociology," is too presumptuous, insofar as today I intend to deal with only the larger social units and thus touch upon only a small sector of the sociological field. I shall be able to present to you only raw expedition-material; the comparative arrangement of these data in South American cultural history will be the work of the next few months.

101 131 The Waika /Waica/ inhabit the upper Orinoco river region in southern Venezuela; their area of habitation, however, is not limited by the Sierra Parima, in which the Orinoco rises and which forms the mountain border with Brazil, but rather extends into Brazilian soil far beyond this mountain chain, about to the middle of the northern tributaries of the Rio Negro and Rio Branco. [161] The Sierra Parima therefore is more the backbone of the living space of this Indian group, which, according to the best estimates, contains about fifty thousand persons and an area of about half 137 the size of West Germany. According to external appearances, [132] this region is counted as tropical rain forest; seasonal differences are only slight and are practically without influence on the life 101 and culture of the people. The critical cultural importance of the 179 forest lies in its isolating effect: between the habitation area of [137] the Waika and the first mixed settlement there extends an almost [487] uninhabited forest-belt several hundred kilometers wide, and since there is very little river traffic and as other means of transportation there are only onerously traversable Indian paths, the culture of the Waika has been able to remain almost completely pure. Only a [797] few material things from our world have as yet found their way to them: a few machetes and axes, a few matches and fishhooks, which an American mission working from 1947 to 1955 under very difficult conditions and we ourselves brought along; since the Waika do not maintain any contacts of their own downriver, however, the barely begun acculturation process does not go on /115/ by itself, but ebbs away the moment the visiting whites leave Waika country.

/1/

1. Geographical Introduction

131 The habitation and roaming area of the Surára and Pakidái lies between the Demini and Aracá rivers -- a terra incognita within the large area between Rio Branco, Rio Uraricuera, Serra Parima, and Rio Negro, which up to now has been so little opened up ethnologically and geographically.

133 The Rio Demini is a left tributary of the middle Rio Negro. Its source is in the Serra Parima, in the Brazilian-Venezuelan border area, and its mouth is just above Barcelos, the former capital of "Capitania do Rio Negro." The water of this river is
133 white, whereas the numerous lakes along its banks and all its
134 tributaries, such as the Aracá, a right tributary of the lower Demini, have black water. The tributaries of the Aracá, on the other hand, are characterized by clear water. This peculiarity is connected with soil conditions, soil erosion, and the topography of the catchment areas. Thus, soil erosion in very mountainous terrain causes a light coloring, whereas in a very flat, swampy region dark humus substances overflow into the water and darken it. It is further noteworthy that black water is healthier and
133 tastier and, in standing, does not leave a dirty sediment. Even
136 water turtles and fish that have lived in black water are tastier than the same animals taken from white-water rivers or lakes. Moreover, it should be pointed out that mosquitoes appear in considerably smaller numbers along black water than along white. On the Rio Demini one can scarcely defend oneself from the small piuns (Simulium sp., day gnats) and the large carapanãs (Anopheles); the latter are the dangerous malaria-carriers. The lower course and part of the middle course are therefore completely fever-infested.

● 137 The two types of water also result in different kinds of vegetation. Characteristic for the Rio Demini are the igapós (inundated forests with tall trees standing close together), between which there is very seldom any terra firma. On the higher banks of the Aracá, however, one finds primarily low scrub-forest. The

/1 cont./

•137 most important useful plants along the middle course of the Demini are the seringueiras (rubber trees -- Hevea brasiliensis Muell. Arg.), and along the Aracá and its tributaries the piaçaba palms (Attalea funifera Mart. and Leopoldinia piassaba Wal.). The chestnut forests that occur in the area around the mouth of the Demini and on the lower course of the Aracá also have economic significance. The chestnut, or more precisely, the chestnut of Pará (Bertholletia excelsa H.B.K. -- its fruits are known in Germany as Pará nuts), is regarded as the queen of the Amazonian primeval forests on account of its tall crown, with which it towers over all the other trees. On the lower Aracá the itaúba tree (Silvia itaiuba Pax.) is of special importance because it furnishes the best lumber in that region. Finally, a few other species of trees and palms, which occur along the Demini as well as along the Aracá, should be mentioned:

a) Trees: imbauba (Cecropia palmata Wild.), angelin-amargoso (Andira vermifuga Mart.), macaranduba (Mimusops sp.), embireira (Anonaceae sp.), matamatazeiro (Eschveilera matamata Hub.), taxizeiro (Cesalpenaceae sp.), ingàzeiro (Inga sp.), abiurana (Lucuma sp.), cajueiro (Anacardium sp.), lucuma (Lucuma /2/ macrocarpa Hub.), wild cacao tree (Theobroma sp.), wild lemon tree (Rubiacea sp.), and cedars (Meliaceae sp.).

b) Palms: açaí (Euterpe oleracea Mart.), bacaba (Oenocarpus distichus Mart. or Oenocarpus bacaba Mart.), buriti (Mauritia vinifera Mart.), bucu (Manicaria saccifera Gaertn.), curua (Attalea spectabilis Mart.), inaja (Maximiliana regia Mart.), patauá (Oenocarpus bataua Mart.), paxiuba (Iriartea exorrhiza Mart.), pupunha (Guilielma speciosa Mart.), tucuma (Astrocaryum sp.), and ubim (Geonoma sp.).

133 The two rivers have many bends and during the summer months, October to March, flow relatively sluggishly. Their water level during this time is extremely low, so that numerous sandbanks
[134] stand out. On the Demini the color of the sand is yellowish, whereas on the Aracá it is gleaming white. The average width of the Demini along its lower and middle course is 200-300 meters,

/2 cont./

133 that of the Aracá 300-400 meters. This may be why, on old maps, the Aracá is erroneously designated as the main river; the course of the Demini, however, is considerably longer. In the middle and upper courses of the aforementioned rivers there are rapids, the crossing of which often endangers life.

The area lying between the rivers represents one of those inselberg landscapes which are so characteristic for the region
133 of the middle and upper Rio Negro. Cone-, dome-, or ridge-
137 shaped granite mountains which individually or occasionally in groups rise up to 400 meters in the form of small massifs or short mountain chains offer a conspicuous contrast to the plain covered with dense primeval forest. Their relatively flat peaks and the gently sloping alluvial cones at the foot are likewise
133 densely forested. At the middle height, however, there appear steep, smooth granite walls looking fluted because of the many rain furrows.

Morphologically these elevations belong to a type which Passarge discusses in his Kalahari work (1) and elsewhere (2) and

1. Passarge, 1904a.

2. Passarge, 1904b.

which he has defined, following Bornhardt, as inselberge. These granite mountains in the Rio Negro region have already been strikingly described by Spruce (3). According to Brandt, who dealt

3. Spruce, 1908, p. 383.

in detail with the morphogenesis of isolated granite mountains, their cone-shaped appearance may be traced back to a "peeling process" of periclinal granite folds (4).

4. Brandt, 1917, pp. 52 ff.

Surára
Waiká
Shiriana
Pakidái

/55 cont./ The Surára acquire these articles by way of barter through their occasional contacts with the piaçabeiros (palm-fiber gatherers) on the Rio Aracá, while they are given to the Pakidái as gifts by the personnel of the Indian protection post Ajuricaba on the middle Demini. To my question as to whether their ancestors had once used stone axes (I could not discover any), I was always given affirmative replies. They also have a special name for the ax -- hanhokomá. The blade alone is named synonymously, whereas the shaft is called -- hanhokomáhitohí. Most probably the stone axes were acquired by barter, as is the case, according to Schuster, for the Waiká (310). Which tribe furnished this

310. Schuster, 1958b, p. 17.

import article could no longer be determined, but this time the Xiriána seem to be excluded as the intermediaries. Koch-Grünberg writes: "They (the Xiriána) in former times apparently had no axes at all to cut down the forest. At any rate, they did not know what to do with a stone ax that I showed them" (311a).

311a. Koch-Grünberg, 1923a, p. 307.

12. Equipment for Climbing

To climb up tall palms with a smooth trunk, such as the açaí (Euterpe oleracea Mart.), bacaba (Oenocarpus distichus or Oenocarpus /56/ bacaba Mart.), bucu (Manicaria saccifera Gaertn.), buriti (Mauritia vinifera Mart.), inaja (Maximiliana regia Mart.), paxiuba (Iriartea exorrhiza Mart.), tucuma palm (Astrocaryum sp.), and others, the Surára and Pakidái use the climbing ring -- horohoromá --, which consists of a split liana (cipó-titica) rolled up several times. The ends of the liana are wound around the ring several times and tied with a knot (Fig. 27). /Fig. 27 appears here./

/56 cont./

481 The man, sometimes also the woman, puts this ring around the feet and presses them, with the hollow between the ball of the foot and the heel, in the form of a prehensile foot, firmly against the trunk so that they are fairly sucked against the bark. He assumes a squatting position and then hoists his body upward.

Fig. 27. Climbing ring.

Although he embraces the trunk with his arms and hands, for climbing he uses only his feet, which, because of the ring, always have a firm grip. This grip becomes particularly important after the man has reached the top where he now uses both hands to cut off the fruits.

[191] Such climbing rings are known in many parts of South America and are also used by the caboclos (Brazilian country people). The invention, however, seems to be of Indian origin.

481 222 [137] The pupunha palm (Guilielma speciosa Mart.), however, which plays such an important role in the economic life of the Surára and Pakidái, cannot be climbed in this fashion, because its trunk, the diameter of which is 60-80 centimeters, is covered with long, pointed thorns. In order to be able to harvest its fruits [184] in spite of this, these Indians use a climbing apparatus -- kanaáke -- which is also familiar to the Waiká (311b).

311b. Barker, 1953, p. 446 and Fig. 1.

Surára
Pakidái

/81 cont./

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with a specially constructed apparatus (see p. 120), bears very narrow, pinnate leaves that are curly at the tips and are always gently swaying in the wind. They stand around the community house like sentinels and seem to be perpetually nodding benevolently and reassuringly to the inhabitants of the large, open maloka (Ill. 6). Their fruits -- maraxá -- (377),

377. The name among the Waiká is very similar -- "lasha" (Zerries, 1956b, p. 149).

50-80 of which form a cluster, are noteworthy. They can be harvested only once a year, between September-April, but each palm has at least three, and sometimes four clusters, that is to say, approximately 200-300 fruits. At first they look yellow, but after ripening they take on a bright red color. In contrast to other palm fruits, they are characterized by especially abundant meat.

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As to the question of whether or not the pupunha fruit has seeds, there are various opinions. Zerries did not find any seedless ones (378). On the other hand, I saw fruits with

378. Zerries, 1956b, p. 149.

seeds and without. This observation is confirmed by statements by Sauer, who writes: "In many cases it has lost the capacity to produce fertile seeds..." /cited in English/ (379).

379. Sauer, 1950 p. 525.

And even Alexander von Humboldt (380) and Vinci (381)

380. Alexander von Humboldt, 1860, III, p. 281.

381. Vinci, 1956 pp. 370-375.

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/81 cont./
mention such seedless fruits (382).

382. Zerries, moreover, thinks it is possible that among the Waiká the pupunha fruit was the predecessor of the mealy banana (Zerries, 1956b, p. 148).

244 The cultivation of tubers, which is always done separately from the banana plantings, has hitherto been practiced on only a very modest scale. It includes the cultivation of taioba or taro (Colocasia antiquorum and Xanthosoma violaceum Schott.) -- ohĩná -- (383), cará or yams (Dioscorea

383. Among the Waiká the corresponding name is "ohina" (Zerries, 1956b p. 153).

sp.) -- cabiromá -- sweet manioc, known in Brazil as macaxeira aipim or mandioca doce (Manihot palmata Muell. Arg.) -- mihitarima -- bitter manioc (Manihot utilissima Pohl) -- kuamirimakóke --, and sweet potatoes (Ipomoea batatas Lam.) -- hikarí -- (384). Worth mentioning

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384. The Waiká call the sweet potato "higalí" (Zerries, 1956b, p. 153).

also are the sugar cane plantings (sugar cane (Saccharum officinale) -- bukí -- (385)) and the absence of maize (386).

385. The Waiká have the same word for sugar cane (Zerries, 1956b, p. 153).

[184]

386. Zerries, to be sure, found evidence of its cultivation by the Waiká. But, he adds, maize "is little more than a rare delicacy" (Zerries, 1956b, p. 153).

Surára
Pakidái

/83 cont./

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394. (cont.)
nourishment during their first and second menstruation (see p. 142), and it represents the most important item of food for pregnant women, and for several months after confinement. Among the Tapirapé, on the other [171] hand, where the banana also represents a basic part of the diet, parents must refrain from eating this fruit after a birth. "They believe that the child would die if they disregarded this rule" /cited in English/ (Baldus, 1956b, p. 601).

252 raw. -- The mealy, nourishing fruits of the pupunha palm are primarily boiled. Then the soup is allowed to cool and a refreshing drink is obtained in this way. Before festivals all the [415] women pour it into a large, wooden trough, which is found in every maloka, so that there will be enough on hand. By means of steaming or roasting, a solid food is also prepared from them (395). --

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395. Alexander von Humboldt, by the way designates the pupunha or pihiguao palm as "Pfirsich-palme" /peach palm/ and praises the delicious taste of its fruit (Alexander von Humboldt, 1860, III, pp. 281 f., 300; IV, p. 145). I cannot agree with the great scholar in this, for to me it tasted like slightly bitter potatoes. Zerries, by the way, is of the same opinion (Zerries, 1956b, p. 148).

Tubaba, cará, sweet potatoes, and sweet manioc are steamed in a pot or roasted in hot ashes without being previously washed or 252 peeled. -- Bitter manioc is scraped by the women with the 412 lancet-shaped bamboo knife (see p. 118) and then grated on a rough slab of granite, for they do not have grating boards (396) (397).

[177]
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396. My servant Mateus, however, made them

2: Becher--266 E-5 (1955-1956) 1960 SQ18 Yanoama SQ18
Surara
Pakidái

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Ill. 1. Indian protection post "Ajuricaba" on the middle Rio Demini

2: Becher--267 E-5 (1955-1956) 1960 SQ18 Yanoama SQ18
Sutáṛa
Pakidái
/2/
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Ill. 2. Cachoeira (rapids) dos Índios on the upper Rio Aracá (during the dry season)

Ill. 3. Cachoeira dos Índios on the upper Rio Aracá (during the rainy season)

2: Becher--268 E-5 (1955-1956) 1960 SQ18 Yanoama SQ18
Surára
Pakidái

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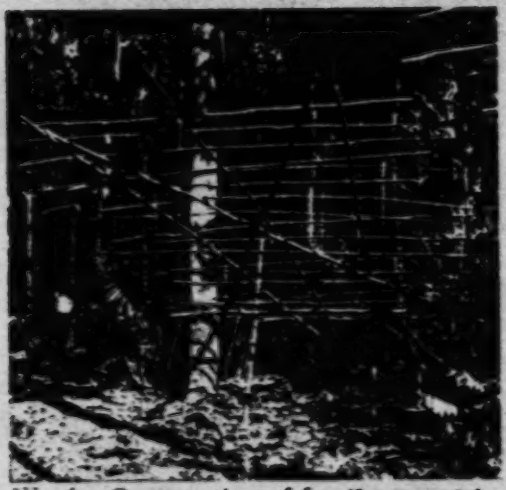

Ill. 4. Construction of family overnight quarters during migrations of the tribe

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Ill. 5. View of the large open Surára maloka in the region between the Demini and Aracá

2: Becher--269 E-5 (1955-1956) 1960 SQ18 Yanoama SQ18
Surára
Pakidái

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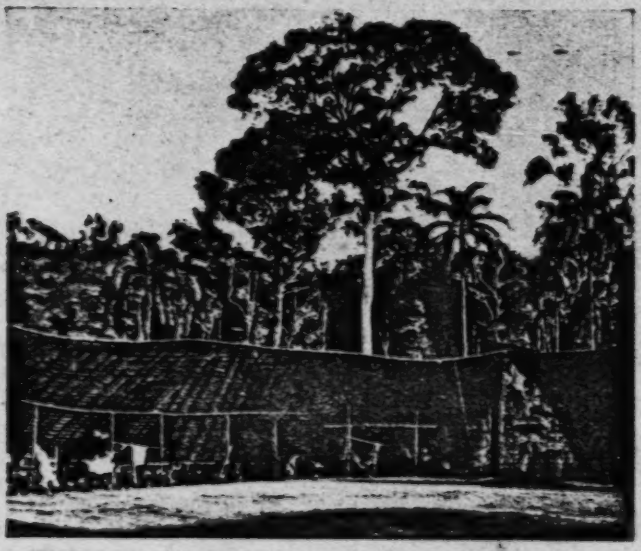

Ill. 6. A section of the large, open Surára maloka

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Ill. 7. Chief's hut (right) and rooster pen inside the Surára maloka

2: Becher-- 272 E-5 (1955-1956) 1960 SQ18 Yanoama SQ18

Surára
Shiriana
Karauateri
Pusehewéteri

/7/

Ill. 15. Surára family. (The woman is a member of the Pusehewéteri and wears the characteristic fringed belt of this tribe)

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Ill. 16. Xiriána woman, Ironasteri, with deforming facial adornment

Ill. 17. Nikeromá, a girl of the hostile Karauateri. (She is a captive of the Surára)

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Ill. 18. Nikeromá (rear view)

2: Becher--273 E-5 (1955-1956) 1960 SQ18 Yanoama SQ18
Surára

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Ill: 19. Yaxoíma, daughter of the war chief of the Surára, with characteristic facial tattooing

Ill. 20. Yaxoíma (left) and Rokoahíma, two Surára girls

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Ill. 21. Jibeauwõ, my little interpreter (right), and Mauahemá (two orphan boys from the tribe of the Surára)

Ill. 22. Two Surára boys. Xaniwõ (right) and Mauahemá, who holds a monkey bladder between his leg

2: Becher--274 E-5 (1955-1956) 1960 SQ18 Yanoama SQ18
Surára
Pakidái

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Ill. 23. The Surára boy Xaniwõ

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Ill. 24. Pakidái woman, Riopemí

Ill. 25. The two oldest Surára women: Rokomá (right and Cinapemí

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Ill. 26. Hammock of embira

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Ill. 27. Liana hammock

Ill. 28. Plaited hammock of cotton

2:Becher--277 E-5 (1955-1956) 1960 SQ18 Yanoama SQ18

Surára
Pakidái

/12/

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Ill. 37. Surára forest clearing in a circle around the large, open maloka

Ill. 38. The Surára chief Hewemao doing field work. He is holding a digging stick in his left hand.

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Ill. 39. Climbing a pupunha palm with the help of climbing apparatus

Ill. 40. Poréhiwõ, war chief of the Pakidái (right), and my guide, Mateus Dias, a pure-blooded Tukano Indian from the upper Rio Negro. A Pakidái youth is squatting in the background.

4: Wilbert--14 E-4, 5 (1958) 1963 SQ18 Yanoama SQ18 ●
Sanema

Venezuelan Indians
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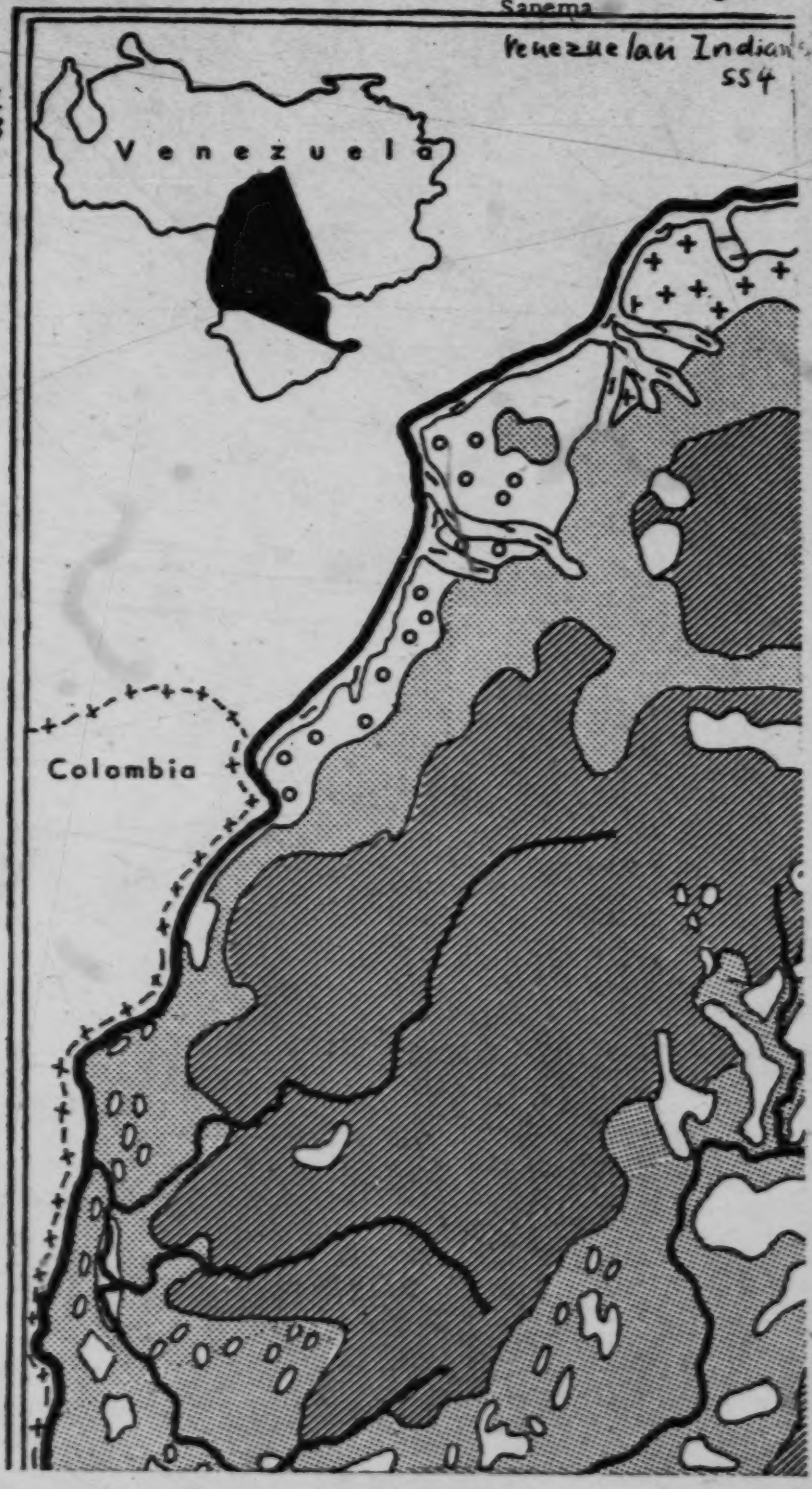

4; Wilbert--15 E-4,5 (1958) 1963 SQ18 Yanoama SQ18 ●
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Venezuelan Indians SS4

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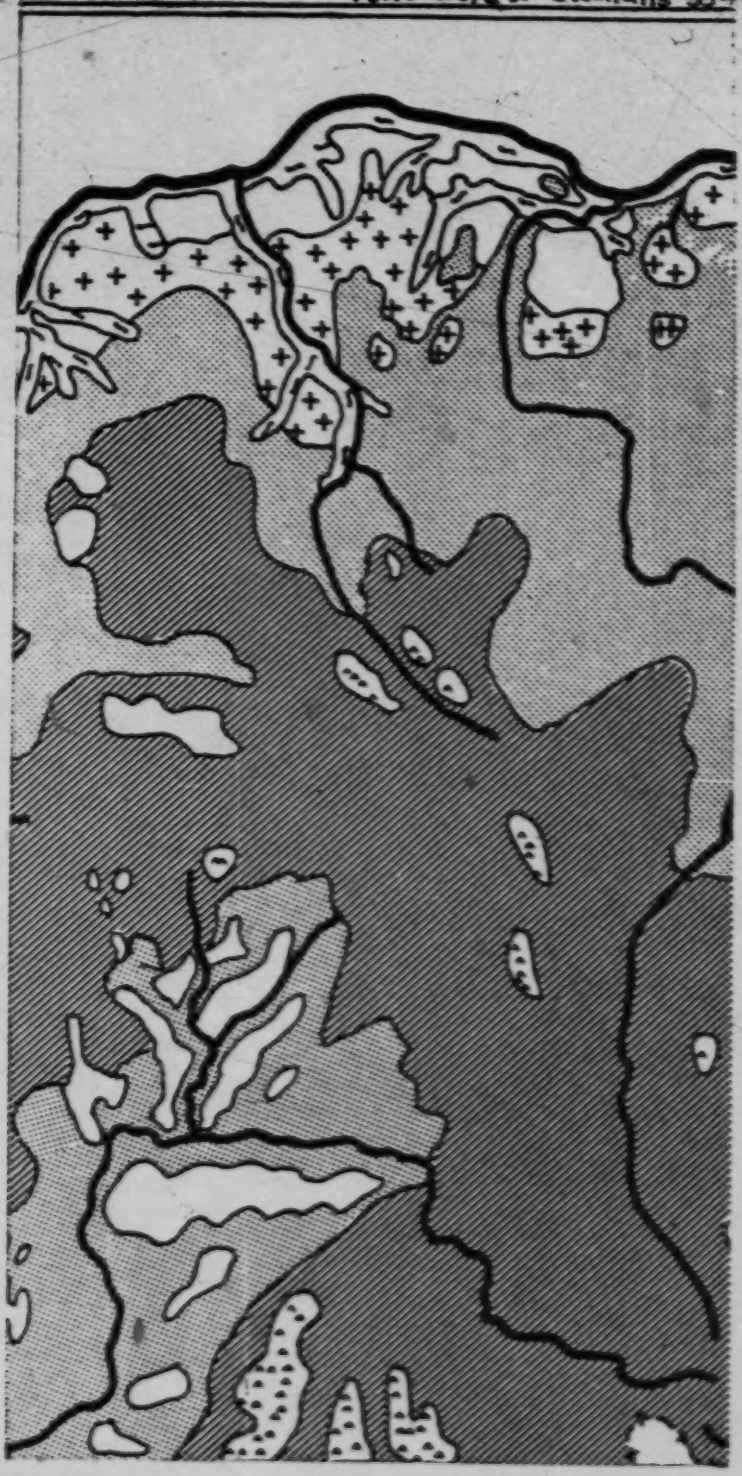

4: Wilbert--16 E-4, 5 (1958) 1963 SQ18 Yanoama SQ18 ●

Venezuelan Ind. 554 Sanema

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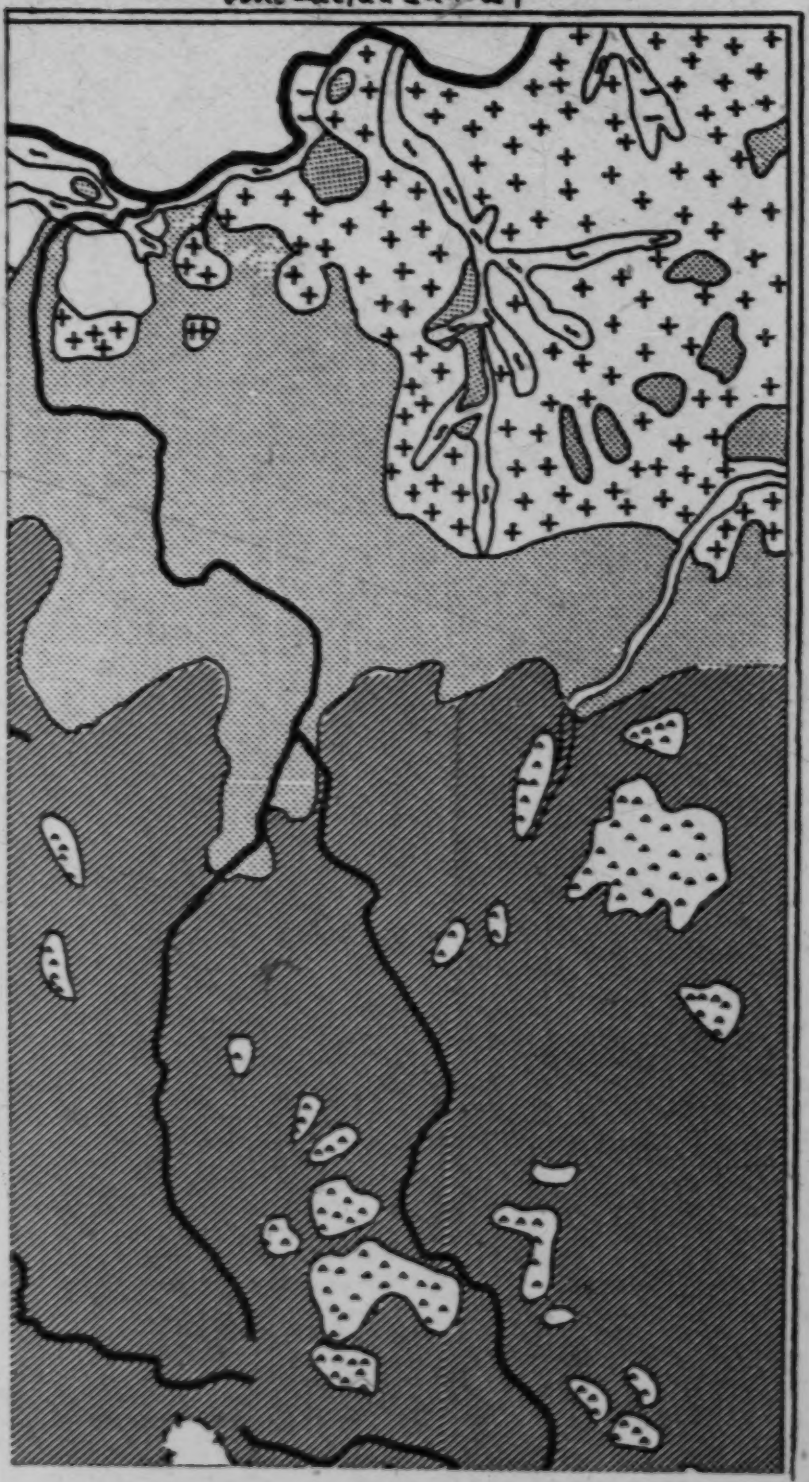

4: Wilbert

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SQ18 Yanoama SQ18
Sanema
Venezuelan Indians SS4

p. 14	p. 15	p. 16
p. 17	p. 18	p. 19

Chart of Positions of Map 6.
/facing Map 6/

4: Wilbert--17 E-4,5 (1958) 1963 SQ18 Yanoama SQ18 ●
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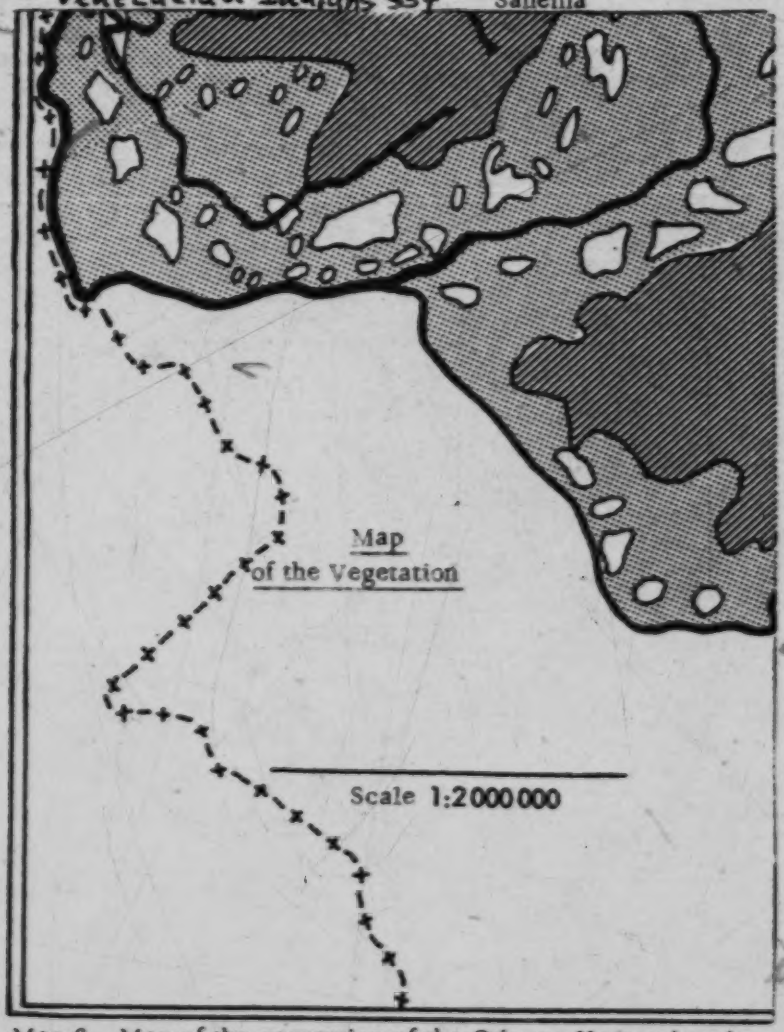

Map 6. Map of the vegetation of the Orinoco-Ventuari region (according to Hueck, 1960).

Chaparrals

Hygrophilous and mesophilous forests in the region of Guayanesa, locally interrupted by savannas

Mesophilous and hygrophilous deciduous forests, in part evergreen, of Guayana, in the low regions

Gramineous steppes of the upper Orinoco

4: Wilbert--18 E-4, 5 (1958) 1963 SQ18 Yanoama SQ18 ●

Venezuelan Indians 56# Sanema

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Steppes and savannas of the high sierras of Guayana

Gramineous steppes of the llanos, with other isolated woody elements

Gallery forests, marked only in dry regions

4; Wilbert--19 E-4,5 (1958) 1968 SQ18 Yanoama SQ18 ●
Venezuelan Indians SS4 Sanema
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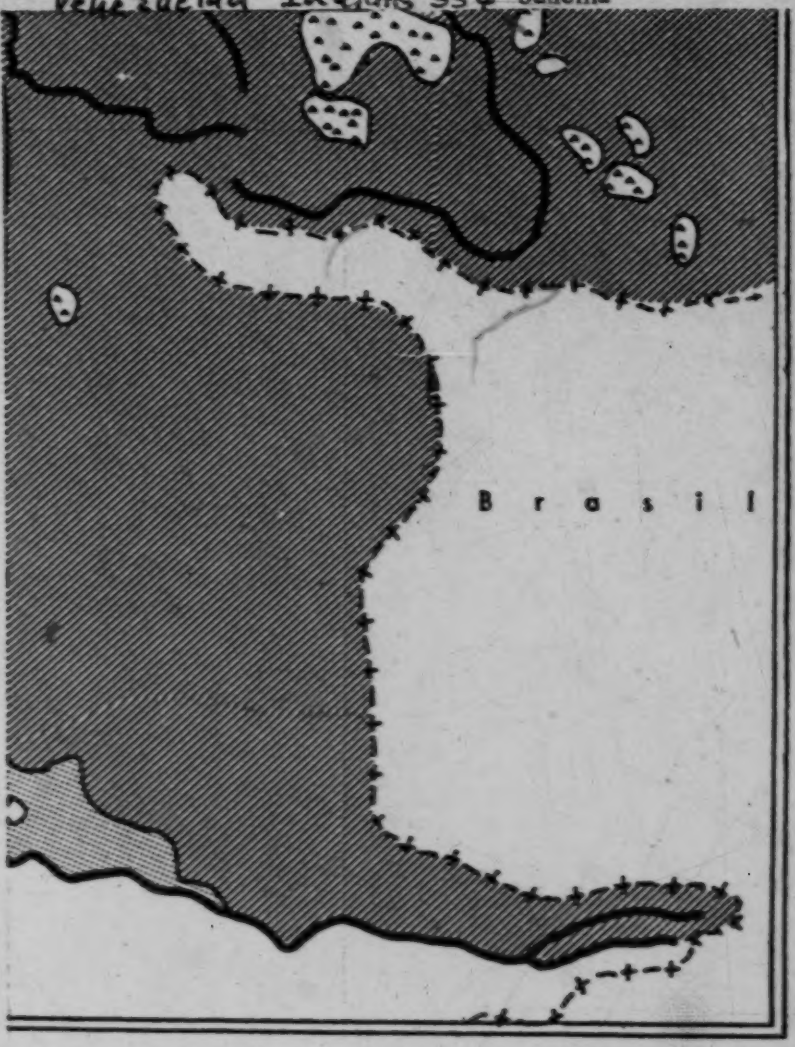

Steppes and savannas of the high sierras of Guayana

Gramineous steppes of the llanos, with other isolated woody elements

Gallery forests, marked only in the dry regions

Sanema
Warao 5518
Saliva 5515
Bari 5513

/180 cont./

The Barí suffered greatly from the Yupa, the Piaroa and Warao from the Caribe, but these sufferings were minimal compared to the oppression to which other tribes were subjected by the Whites. The Yanoama have been attacked for hundreds of years by the Caribe, who surrounded their territory with a semicircle along the north; the Yanoama endured something similar from the Arawak, who surrounded them in a semicircle along the south. But all in all, the White has not been very successful so far in approaching this primitive population and his destructive influence has not affected their ancestral customs. The Caribe and Arawak have declined gradually in vigor and numbers; now we are witnesses of the triumph of the Yanoama over their neighbors of a more refined culture, for not only did they defend their territory, but were successful in spreading to the north and west.

The strongest and most efficaceous ally of the Yanoama has been the Cordillera de Parima, together with the dense tropical selva of the Territorio Amazonas. In the /181/ fateful period of persecution they have always found a safe refuge in the protecting selva. Nevertheless, as of relatively recent times, the different Yanoama subtribes are beginning to realize that the space beyond the conventional boundaries of their tribal territory is sparsely populated, almost deserted. The number of their traditional enemies has diminished considerably, and the invasions of their territory have had practically no consequences. In this manner they have gained almost 100 kilometers to the north of the Sierra de Pacarima, where the Casapare now live on the Upper Paragua, and the northern group of the Sanemá on the headwaters of the Ventuari, Erebato, and Caura rivers.

The center of distribution of the Casapare is located to the south of the Sierra Pacarima in the basin of the Rio Branco. We know this Yanoama subtribe only through a few sporadic superficial contacts, and the people, as well as their territory, remain practically unknown. For this reason we consider the name Casapare with which we designated all the Yanoama in the zone of study as strictly preliminary, and we would not be surprised if we had to change it in the future for a more exact and adequate

name.

/200 cont./

162 C. Sanemá of the upper Ventuari (Nabudub)

Locality	No. Inhabitants	Observations
1. Weweña	50	The Nabudub of Ihuduña
2. Wadekuña	80	frequently move between
3. Mahanaña	50	the Ventuari and the
4. Ihuduña	200	Erebato.
Total	380 estimated individuals.	

161 According to this demographic estimation there are approximately 2,150 Sanemá in the zone of the upper Ventuari, Erebato, and Caura. We do not know how many Sanemá live on the Padamo.

342 We have seen four different types of houses among the Sanemá: (a) windscreen type, (b) triangular in shape and Makiritare system, (c) rectangular, and (d) oblong. We have found types (a) and (b) together in the same encampment on the Ventuari, facing Caño Mosquito.

342 361 [501] [137] [262] On our trip through that place we saw two Sanemá rafts moored on the bank of the Ventuari. We later climbed a cliff and followed a path which led us to a conuco of the Sanemá. At one end there was a gigantic algarroba tree laden with fruit. Judging from the skins scattered on the ground, we realized that the Sanemá had consumed a great quantity. Near the tree, which in times past offered them /201/ its generous shade, we found a desolate Sanemá encampment. It was made up of five

342 triangular huts and two of the windscreen type. Both types of construction seem to be typical of the Yanoama and are remarkable for their size, somewhat small. For the construction of a triangular cabin six poles 1.60 meters long are needed to serve as posts or supports. Three pairs are made out of them, each bound at the upper end with a bejuco, and with some 30 centimeters left free in order to form a fork. The lower parts of the poles are stuck into the ground at a distance of half a meter. These forks in tepee form with a separation of two meters form a [824] regular triangle. Three sticks are later placed on the forks, and these support the roof made of platanillo /Musaceae/ leaves. A similar rancho was described by Koch-Grünberg (1923, Pl. 43).

6: Vinci T-5 (1950) 1959 SQ18 Yanoama SQ18
Sanema

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The Silent Hunters

[Frontispiece - facing title page]

6: Vinci T-5 (1950) 1959 SQ18 Yanoama SQ18
Sanema

133 the forest lands, and their tops are so high and so difficult of access that this has helped to preserve a biological world completely distinct not only from that of the surrounding lowlands of the Caroni, Paragua, Caura, and Orinoco valleys but also from that common to all other valleys in the American [114] continent. A few decades ago, when the aeroplane first enabled us to study these regions and their geological peculiarities, some observers proceeded to formulate wild theories which aroused more legitimate emotions in the breasts of explorers and scientists.

The formation of sandstone and conglomerate which overlays the original basic rock of this region to a depth of 2,500 metres was eroded almost completely on the periphery of these uplands, leaving the great flat-topped mountains isolated. This geological phenomenon began in the Secondary Era, when the plant and animal life on our planet was appreciably different from what it is today. The process of erosion continued right down to the ancient granite crust, while on the uplands flora and fauna continued as hitherto, restricted now to their new isolation. Communication between the heights and the plain became impossible. The pressure at 2,500 metres is very different from what it is at four hundred, and creates peculiar physiological changes in the organisms that adapt themselves to it.

13 It seemed possible that the flat tops of these mountains, which from the air
114 appeared to be covered with bush, would not only reveal unknown vegetable species but also animals which scientists believed to be extinct. Perhaps certain monsters from the Mesozoic age—the Saurians, it might be, the inspiration of so many fantasies—still lived and pastured in deep chasms scooped out by the waters of ages. Speculation wove many a scientific fantasy.

In reality, the monsters remained well and truly buried in their geological strata and no mountain could preserve forms of life surviving through a radical
● 137 change of atmospheric and geological conditions. What did come as a surprise, however, on these mountains—and the Sarisariñama itself proved the point—was an entirely individual flora: orchids, epiphytes, bromeliads and lianas of hitherto unknown types, which are likely to keep botanical students busy for a long time all over the world.

136 The usual fly-catchers, merry little birds I had already known closely on other high Guiana mountains, came to greet us. Never having seen animals bigger than themselves, these birds took us for strange trees with two big humid flowers distilling honey at the top: our eyes. First one of them came

6: Vinci T-5 (1950) 1959 SQ18 Yanoama SQ18
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13. *For the Shyriana, lianas provide a continuation of the forest road.*

[P.96-C]

6: Vinci T-5 (1950) 1959 SQ18 Yanoama SQ18
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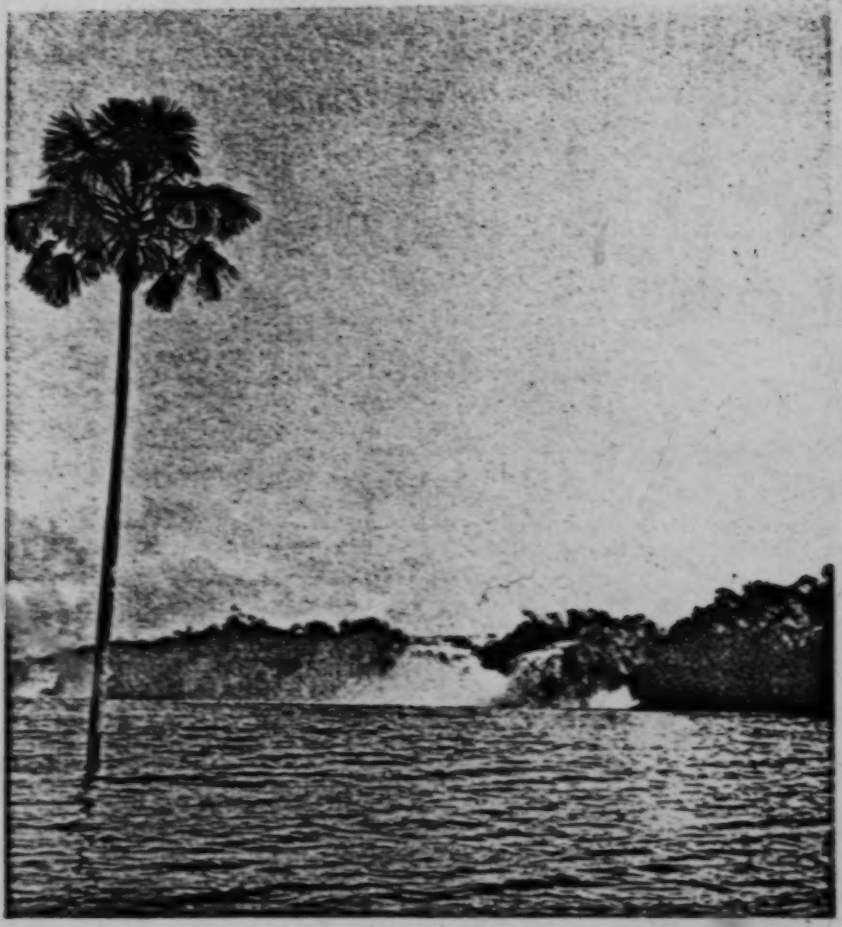

22. The great Canaima Falls.

[p. 144-A]

6: Vinci T-5 (1950) 1959 SQ18 Yancama SQ18
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44. *The charge goes into the blow-pipe: a demonstration by Mahamakana.*

45. *The blow-pipe in action.*

[no. 192-D]

6: Vinci T-5 (1950) 1959 SQ18 Yanoama SQ18
Sanema

we ate rice with butter. Evening found us a little higher up, in a featureless region. There were no streams, only dirty pools of mud and water tinged red with the clay. The track, inexplicably, was now taking us south-west, across lofty hills which grouped together were almost a cordillera in themselves.

The absence of game was typical of the higher altitudes, marked too by the coldness of the nights and the incessant rain which fell both then and for the greater part of the day.

From one steep slope, we suddenly saw the lowlands—a great valley lay spread before us, full of cloud. On its far border rose two enormously high peaks, conical in shape and completely covered with a greenish-black fuzz of forest. Over the leafy surface drifted soft veils of cloud, wafted on the rising breath of the valley. Through the trees nearer to me, I caught a glimpse of another, isolated, mountain almost lost in the clouds behind the two wooded peaks.

For a moment I had a deep awareness of the vast size of the forest: I absorbed it, as the roots of all growing things absorb the tang and savour of the very earth itself. Regions vaster than the life of a man! But more terrible than the vastness of the jungle was the vegetable life it supported—the expression of its universal power.

Euphorbia trees, with their soft wood and the nuts beloved of macaws, transforming that same tang of the earth, within their secret filters, into the white milky sap that rises like a tide to swell their bark. Giant *guarumbo* trees, generously scattering their legions of seeds on the earth to kill them forthwith by their own shade—so that the hope of seeing some new young tree rise up to keep the old one company must go ever unfulfilled—a blind orgy of creation that leads only to the death of the young: until at last the old tree crashes down and a great patch of sky is thrown open and the sun's rays pour through, to nurse the little ones and raise them up to look out over the tossing waves of the forest surface. Sandalwoods, sweet-smelling as incense. *Tarumarchi*, distilling crystalline balsams in the chilly night. Cedars that the lightning splits as cleanly as an axe. Kapoks and Cecropiae, rapid in growth as if the very earth itself was swelling upwards to explode into the sun: light-timbered scatterers of seeds that are launched on the wind to bear the fecund message of their light-limbed race to every corner of the forest. *Aimoumou*, springy as steel, soured by their own store of bitter sap that holds back the milder, more insipid water. Ebony trees, secure in the hardness of their wood, the living outcrop of the mountain's

6: Vinci T-5 (1950) 1959 SQ18 Yanoama SQ18
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137 mineral core. *Miconiae*, afraid of the dark and only conquering their fear by shooting out their branches like fists against the throng that hems them in. *Clusiae* with their poisonous spirit, embracing their frank and upright neighbours with their green endearments and smothering them in their coils like the parasites they are.

Tall and mighty Cassias, glorious verdant mountains decked with gardens of flowers, heavy with the great weight of their fruit, the hollows of their trunks a sanctuary for bees, a splendid challenge to storm and tempest and a safe refuge for the young disciples at their feet. The twisted Ficus with its strangely buttressed roots, a Gothic monument with its arches, ribs and tracery; an athlete, a contortionist in a world of trees geometrically straight; bountiful of its fruit and its soft gums. A whole eager population of *vochysiae*, *rubiaceae*, *cesalpiniae*, *bonnetiae*, *sapindaceae*, *mimosae*, *sapotaceae*. Palms like hypertrophic grasses, swelling their stems up into the proud semblance of tree-trunks: old as the origin of the world, and offering at every season a branch laden with sweet fruit, hard and heavy as the days of its life on the wind-tossed heights.

A population of cellulose and chlorophyll, mighty, awesome, endless—besieged by a vast army of the halt, the maimed and the blind; by parasites and procureuses, forgers, poisoners, physical and moral invertebrates, strumpets and swindlers of every shape and size. For these, too, have their place in the forest and their assault has a violence and intensity which only the great trees, standing clear and four-square, can resist. Liana enwreaths them and writhes round them, to their peril, in all its varied, fatal forms: wire-liana, tying the tree to the ground: chain-liana, manacling it: climbing plants, coiling round it like snakes: passiflora, whose evil flowers are like nails driven into the quick of the tree: curare and barbasco that foul the air with the reek of their death-dealing purpose. Mould that creeps slowly round the trunks and lichens that seep into the cracks and fissures of age. Ferns brush round the base of the trees where the tusks of the peccaries have torn wounds in the bark. Fungi, the pansies of the mouldering earth, colonise the great low-sweeping boughs. Bromeliads spread over the remoter branches and there discharge their content of foetid water imbued with insect remains. Orchids cling to the soft bark, and their evil flowers put out mocking tongues. While mistletoe growths of parasites plunge their steely darts into the very heart of the tree and draw out the sticky gums that link their destinies with the mightier growth.

6: Vinci T-5 (1950) 1959 SQ18 Yanoama SQ18
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A vast and multiform horde it is that besieges the trees; a people millions strong, each one of whom wages its own small war and combines with the rest in the greater struggle.

IV

In the three brothers, all that was best in this wild region could truly be said to have found some form of expression. Their reactions were at times incomprehensible—sudden reflexes resulting from a life utterly different in every way from our own and in some degree akin to the animals'. They were always together, not mixing with the other Shirians and building their own little separate shelter. Every night, when work was finished, they came to us, rubbing themselves against us and indicating by gestures what goods they would like for their pay.

They had certain phobias, the most interesting being a fear of nails. Carmine always had a long nail handy, and each evening he would hammer it into one of the hut-poles to hang up his gun and cartridge-case. This produced a terrible effect on one of the brothers. He would stand and watch as if paralysed, for all the world as though the nail was being driven into his own forehead. If Carmine showed him the nail, holding it out to him, he would cry '*Ma, ma!*' and run off to hide in his little hut. Generally, however, he was most friendly, even affectionate, towards us. Carmine had once rashly promised to cut his hair for him, and since a haircut for one meant a haircut for everybody and the expedition's only pair of scissors was precious, we lost a whole day while my companion gained some experience of the barber's trade. The Indians spent their time looking at themselves in the glass and examining each other's coiffure for defects which they wanted attended to at once.

In imitation of the tales the Shirians told, Carmine had invented a terrifying personage called Barabàn, a kinsman of his, who lived somewhere over the mountains. Barabàn made such an impression on everyone that the myth became a real moral weapon and came in very useful when the Indians needed a little prodding. When Carmine told his tale, in a mixture of Shirian, Makiritari, Spanish, Portuguese and Italian, they would listen with eyes like saucers, in curiosity and fear: 'Barabàn and a hundred robbers and a hundred fierce dogs—they live in the trees like monkeys—eat women and children, cooked—

/436 cont./

132 The rains at El Platanal are copious, and there is no true dry season there. There is never a day when one can feel safe from rain if he does not have a roof over him. The longest dry period which I have heard of was ten /maps appear here/ /437/ days. Droughts are so unknown that nobody thinks about the fact that rain is necessary for the crops. In El Platanal, almost all of the winds and the rainstorms come from the east.

• 137 The basin of the Upper Orinoco is covered by a tropical forest. Above the savanna at La Esmeralda, meadows are virtually nonexistent. There is one hillside on the north bank of the Upper Ocama which is covered with grass, but aside from this, and a few rocky slopes where not even grass grows, the tree cover is practically uninterrupted, with the exception of the clearings opened by the currents of water and the hand of man.

133 If one climbs the hill at El Platanal on a clear day, he will see an extensive plain toward the north. On the northwestern horizon rise the distant peaks of Duida and Marahuaca. These seem to blend into the even more distant montañas of the Upper Padamo and the Ventuari River farther to the north. Following these mountains toward the east with the eyes, one almost believes that he can make out the boundaries of Brazil from the headwaters of the Ventuari River down to the headwaters of the Ocamo. Then, looking toward the east, one can see the entire area between the Ocamo and Orinoco rivers, full of mountains which are not very high, but which are impressive because they are no near. But the north and northwest of Platanal between the Ocamo and Orinoco rivers is the part nearest to the plain described above.

Toward the south there is a narrow plain along the Orinoco River, then hills which are combined with the mountains of the headwaters of the Orinoco to the east and the mountains of the Upper Mavaca to the south. Then, looking toward the southwest and the west, there is the extensive plain of the Mavaca River, interrupted only by a few isolated mountains. Beyond this plain are the mountain ranges which, beginning at the headwaters of the Mavaca, extend toward the west and then toward the north, almost as far as the Orinoco itself.

9:Grelier K-5 (1951) 1957 SQ18 Yanoama SQ 18
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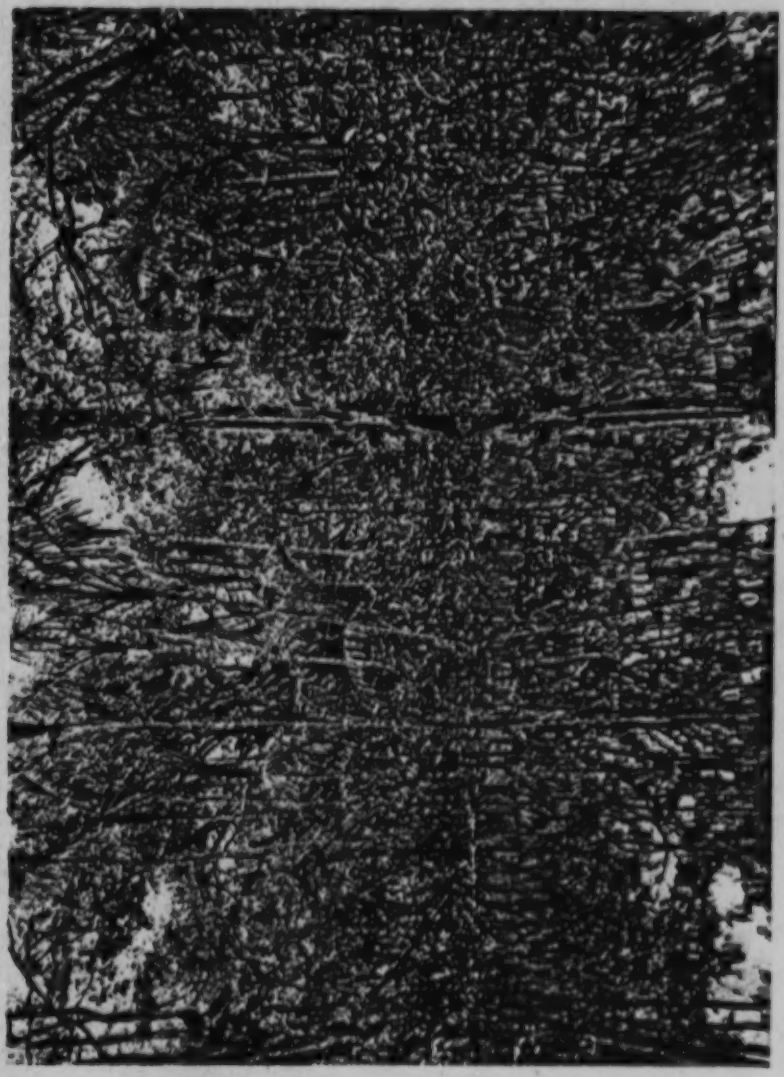
TOP: The famous Piedra del Cocuy juts upwards from the forest.
(*Photograph by H.M. King Leopold*)

BOTTOM: The first Waikas appear between the trees and hail us.
(*Photograph by J. Grelier*)

[p. 96 – B]

9:Grelier K-5 (1951) 1957 SQ18 Yanoama SQ 18



Flooded forest. (Photograph by H.M. King Leopold)

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[p. 96 - C]

large entrance, that leading to the river or stream. All entrances are covered with dry leaves and brush in the evening and the slightest movement of the covering creates sufficient noise to alert the dogs.

The Yąnomamö occupy a relatively homogeneous geographical region of low-lying tropical jungle interrupted by densely-wooded hills that sometimes reach an altitude of 2,500 feet, some 2,000 feet above the elevation of the general terrain. Larger hills are more common in the headwaters of the Orinoco and along the boundaries separating Brazil from Venezuela, but the Indians prefer to make their villages in the lowlands on small streams, as all of their travelling is done on foot. Only recently have the Yąnomamö begun moving to the larger rivers, where they may obtain canoes and steel tools from foreigners. In 1950 there was only one Yąnomamö village, Mahekodo-tedi, on a navigable portion of the Orinoco River; since then at least seven or eight villages have moved to the Orinoco or one of its larger tributaries in order to gain access to trade goods (axes and machetes) foreign to their culture. The overwhelming number of Yąnomamö villages, however, can only be reached by walking to them. During the wet season (April-September) travel all but ceases between villages because the trails linking villages are inundated.

The Yąnomamö are slash-and-burn horticulturists, subsisting mainly on plantains and bananas, of which they cultivate four or five varieties each. Following these crops in economic importance are several root crops, including taro,

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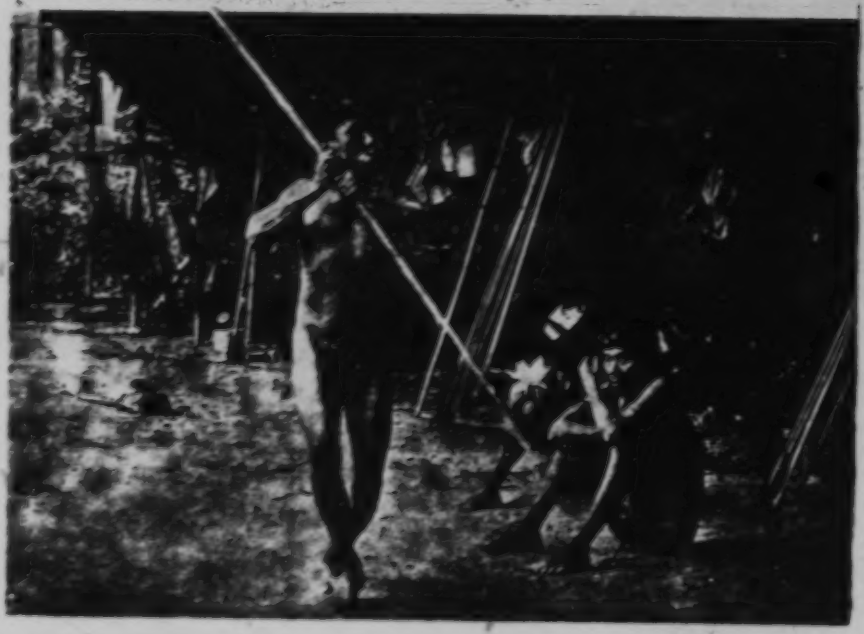
Visitors coming to village circle for ballet to invite them "home" (described in Chapter 4).

Shamans (carrying club) chanting to Hekura (demons) while curing a patient (man sitting in foreground). Patient later died of malaria (described in Chapter 2).



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11: Chagnon E-5 (1964-1968) 1968 SQ18 Yanoama SQ18

2

Adaptation

THE YANOMAMÖ ADAPTATION to their physical, social, and intellectual environments is dealt with in this chapter.

The Physical Environment

Kaobawä's village[1] is Upper Bisaasi-teri, located at the confluence of the Mavaca and Orinoco Rivers. Like most of the villages in this area, it lies at an altitude of about 450 feet. While some villages in Brazil reach 3000 feet in altitude, most Yanomamö villages are located at much lower elevations (Fig. 2-1).

The general area around Kaobawä's village is a low, flat plain interrupted occasionally by gently rolling hills and, more rarely, by a few low mountain ridges. The land is entirely covered with jungle, even the tops of the mountain ridges.

The jungle is relatively dense and characterized by numerous species of palm and hardwood trees. The forest canopy keeps the sunlight from penetrating to the ground, but scrub brush and vines manage to grow in relatively great abundance in most places, making it difficult to walk along the trails. Thorny brush is especially heavy along the banks of streams, where adequate sunlight and a constant supply of water provide ideal circumstances for its growth.

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[1] See map, Fig. 2-8. Villages other than Kaobawä's have been included because they are discussed in this and also in a later chapter. Presently occupied villages are indicated in upper-case lettering and by shading. The area shown in this map is unexplored, except for the zone immediately adjacent to the Orinoco River. The map is, therefore, largely calculated guesswork. To establish dates of occupation I estimated ages of individuals and obtained their stated places of birth. Distance and geographical location were determined by compass readings and measured in sleeps required to reach the location from a given point. I also visited many of the locations shown. While I was in Brazil in 1967, I checked the map locations with informants there, being encouraged by the fact that they independently gave approximately the same information. Fig. 2-8 is a simplified version of the more detailed map c in my doctoral thesis (Chagnon 1966). For more information regarding the techniques used in making the map, consult the thesis.

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Fig. 2-1. A Yąnomamö village and plantain garden, aerial view (Toototobi River, Brazil).

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TRAILS AND TRAVEL. Trails lead out from the village in several directions. Some of them terminate in the gardens that surround the village, but a few of them continue on into the jungle and lead eventually to other villages. The unexperienced eye would not recognize them as trails, as they are hardly more than winding paths through brush, over or around logs, through streams and swamps, and up hills. The Yąnomamö take the most direct route to their destination, regardless of the terrain. A foreigner learns how to recognize a trail only after considerable experience. The most telltale signs are the numerous broken twigs at about knee height left by Yąnomamö travelers who compulsively keep their hands occupied snapping off brush and twigs as they walk. Another sign is the occasional log that is worn smooth from the tread of numerous travelers who prefer to walk along a log rather than go around it.

The most commonly used trail from Kąobawä's village leads to the two Shamatari villages, Reyaboböwä-teri and Mąmariböwä-teri, southwest of Upper Bisaasi-teri. Hardly a week goes by in the dry season without a few individuals making a trip from one of these villages to Bisaasi-teri or vice versa. A group of young men can make this trip in one day if they walk rapidly and leave early in the morning. Older men, women, and children must plan on a two day journey, as they walk more slowly and rest more frequently. There are a number of temporary shelters along the trail built by previous visitors, so the traveler does not have to spend much time putting one of these into repair should he decide to camp overnight.

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11: Chagnon E-5 (1964-1968) 1969 SQ18 Yanomama SQ18

"Razor grass"—a reed—also grows wild in the jungle. It is used by the Yąnomamö to cut their hair and to keep their tonsures closely shaved. A sliver of this reed is wrapped around the index finger in such a way that the sharp edge is exposed. The practiced hand can shave a head bald in a matter of minutes and with no more pain than would come from using a dull steel razor blade. This grass is also found around some of the villages, but appears not to be cultivated.

HALLUCINOGENIC DRUGS Another useful plant provided by the jungle is the ebene tree. The inner bark of this tree is used in the manufacture of one kind of hallucinogenic drug. The bark is scraped from the trunk after the exterior layer of bark is removed, or is scraped from the inside of the bark surface itself. This material, which is fairly moist, is then mixed with wood ashes and kneaded between the palms of the hands. Additional moisture is provided by spitting periodically into the pliable wad of drug. When the drug has been thoroughly mixed with saliva and ashes, it is placed on a hot piece of broken clay pot and the moisture driven out with heat. It is ground into a

Fig. 2-2. Women fishing in a downed stream that has been poisoned by the juice of a wild liana. The poison is introduced upstream by the men, and the stunned fish are collected in baskets by the women.

11: Chagnon E-5 (1964-1968) 1968 SQ18 Yanoama SQ18

Fig. 2-6. Rerahawä climbing a rasha *tree to collect the palm fruit. The tree has many sharp spines on it, and the Yąnomamö use an ingenious device made of crossed poles to climb the tree. The climber stands on one pair of poles and lifts the other pair up the tree. Then he climbs to the upper pair and lifts the bottom pair up. In this way the tree is slowly ascended, and no thorns get stuck in the body.*

The grubs

are wrapped in small packages of leaves and placed in the hot coals to roast. They render down in the heat, yielding some liquid fat, which is licked off the leaves, and a soft, white body. I could never bring myself around to eat one, but an experienced missionary told me they tasted very much like bacon. But then I suppose that anything cooked in a smoky fire tastes like bacon.

The discarded seeds of palm fruits also get infected with much smaller grubs. The Yąnomamö break the hard seeds open with a rock, extract the grub, and prepare it in the above manner.

Some species of caterpillar are also eaten. They are not cleaned before cooking; the squirming insects are simply wrapped in leaves and thrown into the coals to roast.

Fig. 3-6. Women hauling firewood from the jungle to the village at dusk.

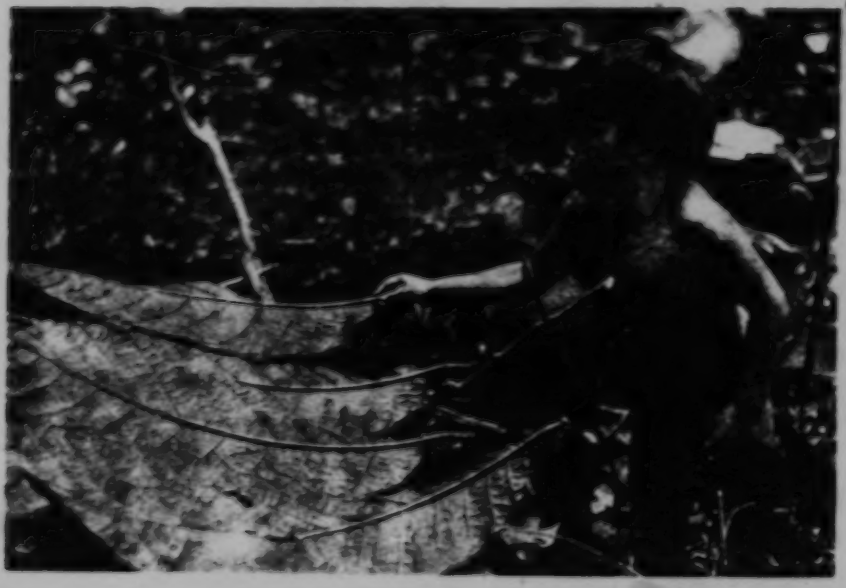
for suitable wood. There is usually an abundant supply *in* the garden within a year of the clearing of the land, but this disappears rapidly. Thereafter, the women must forage further afield to collect the daily supply of firewood, sometimes traveling several miles each day to obtain it. It is a lucky woman who owns an axe, for collecting wood is a tedious job without a steel tool. The women can always be seen at dusk, returning to the village in a procession, bearing enormous loads of wood in their pack-baskets (see Fig. 3-6). Good planners will spend a great deal of time collecting wood on some days so that they can take a vacation from this chore on others. If a woman locates a good supply of wood near the village, she will haul as much as she can and store it rather than let it be taken by her covillagers.

Women must respond quickly to the demands of their husbands. In fact, they must respond without waiting for a command. It is interesting to watch the behavior of women when their husbands return from a hunting trip or a visit. The men march slowly across the village and retire silently to their hammocks. The woman, no matter what she is doing, hurries home and quietly but rapidly prepares a meal for the husband. Should the wife be slow in doing this, the husband *is* within his rights to beat her. Most reprimands meted out by irate husbands take the form of blows with the hand or with a piece of firewood, but a good many husbands are even more brutal. Some of them chop their wives with the sharp edge of a machete or axe, or shoot them with a barbed arrow in some nonvital area, such as the buttocks or leg. Many men are given over to punishing their wives by holding the hot end of a glowing stick against them, resulting in serious burns. The punishment is usually, however, adjusted to the seriousness of the wife's shortcomings, more drastic measures being reserved for infidelity or suspicion of infidelity.

Women always bring their children with them, particularly younger children, so that if they are abducted, the child will not starve to death because of the separation of the mother. They are therefore concerned with the political behavior of their men and occasionally goad them into taking action against some possible enemy by cruelly accusing the men of cowardice. This has the effect of establishing the village's reputation for ferocity, reducing the possibility of raiders abducting the women while they are out collecting firewood or garden produce. The men cannot stand being chided by the women in this fashion, and are forced to take action if the women unite against them.

CHILD-ADULT DIVISION Despite the fact that children of both sexes spend much of their time with their mothers, the boys alone are treated with considerable indulgence by their fathers from an early age. Thus, the distinction between male and female status develops early in the socialization process, and the boys are quick to learn their favored position with respect to girls. They are encouraged to be "fierce" and are rarely punished by their parents for inflicting blows on them or on the hapless girls in the village. Kajabwiri, for example, lets Ariwasi beat him on the face and head to express his anger and temper, laughing and commenting on his ferocity. Although Ariwasi is only about four years old, he has already learned that the appropriate response to a flash of anger is to strike someone with his hand or with an object, and it is not uncommon for him to give his father a healthy smack in the face whenever something displeases him. He is frequently goaded into hitting his father by teasing, being rewarded by gleeful cheers of assent from his mother and from the other adults in the household.

Fig. 5-7. Ariwasi, Kajabwiri's favorite son, building the male-hollow house while romping with his father. His "sister" (father's brother's daughter) looks on.



11: Chagnon 8-5 (1964-1968) 1988 SQ18 Yanomama SQ18

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Fig. 5-2. Kaobawā's men and their allies lining up (wayu iroa) *to raid the Patanowā-wei.*

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children and women died down and all was quiet in the village once again. I squatted there, unable to see what was going on, growing more nervous by the moment, half suspecting that the warriors were sneaking up on me to murder me for tape recording a sacred rite. Then the silence was broken when a single man began singing in a deep baritone voice: "I am most hungry! I am most hungry! Like the carrion-eating buzzard I hunger for flesh!" When he completed the last line, the rest of the raiders repeated his song, ending in an ear-piercing, high-pitched scream that raised goose bumps all over my arms and scalp. A second chorus, led by the same man, followed the scream. This one referred to meat hunger of the kind characteristic of a particular species of carnivorous wasp. They screamed again, becoming distinctly more enraged. On the third chorus, they referred again to the buzzard's meat hunger, and a few men simultaneously interjected such descriptions of their ferocity as: "I'm so fierce that when I shoot the enemy my arrow will strike with such force that blood will splash all over the material possessions in his household!"

Then the line of warriors broke, and the men gathered into a tight formation, weapons held above their heads. They shouted three times, beginning modestly and increasing their volume until they reached a climax at the end of the third shout: "Whaaaa! Whaaaa! WHAAAA!" They listened as the jungle echoed back their last shout, identified by them as the spirit of the enemy. They noted the direction from which the echo came. On hearing it, they pranced about frantically, hissed and groaned, waving their weapons, until Kaobawā calmed them down, and the shouting was repeated two more times. At the end of the third shout of the third repetition, the formation broke,